

ABSTRACT

A system for mounting heatsinks, in particular, high-mass heatsinks, on printed circuit boards, such as motherboards. The mounting system includes a backplate, disposed beneath the motherboard, with pins protruding up through the motherboard, and a linkage assembly, which is fixably attached to a base portion of a heatsink assembly. The linkage assembly includes scoops, for grasping the pins during engagement, and a ratcheting system, for compressing the heatsink and thermal interface material onto the package. The mounting system is designed to effectively distribute the heatsink weight, as well as the forces caused by chronic and dynamic stresses, through, rather than upon the motherboard, such as to a chassis. The mounting system thus alleviates stress cracks, component pullout, solderball stress, and other damaging conditions to the motherboard. The mounting system may be engaged and disengaged without the use of tools.